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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,909	03/30/2004	J. Peter Hoddie	450103-04996	2889
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				WENDELL, ANDREW
			ART UNIT	PAPER NUMBER
			2618	

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/814,909	HODDIE, J. PETER
	Examiner	Art Unit
	Andrew Wendell	2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 28 April 2006.  
 2a) This action is **FINAL**.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-33 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-33 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date: _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5-6, 9-11, 16, 19-22, 24, 29-31, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotzin (US Pat Appl# 2004/0204076) in view of Ishii et al. (US Pat Appl# 2005/0085188).

Regarding claim 1, Kotzin's subscriber device for enhancing interfaces thereto teaches a wireless communication interface 103 (Fig. 1) supporting communication across a wireless connection 109 and 111 (Fig. 1); and a controller 207 (Fig. 2) connected to the wireless interface 203 and 209 (Fig. 2) supporting a negotiation service and a communication service (Section 0019); wherein the negotiation service provides interface negotiation for using the wireless interface to negotiate with another device to select a communication interface for communication of data with the another device (Sections 0019-0021), wherein the negotiation service negotiates to select an appropriate communication interface for communication of the data with the another device (Sections 0019-0021), and the communication service provides control and management of communication with the another device across a connection established using the negotiation service (Sections 0019-0021). It is obvious that there is communication of data between the devices since it is part of a network structure and

supports services (messages, Sections 0013-0014). However, Kotzin fails to specifically teach communication of data.

Ishii et al. transferring data objects between portable devices teaches an interface for communication of data with another device (Section 0024).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate communication of data as taught by Ishii et al. into Kotzin's wireless communication interface in order to reduce other communication means and costs (Section 0012).

Regarding claim 2, the combination including Kotzin teaches wherein the wireless interface support Bluetooth (Section 0014).

Regarding claim 3, the combination including Kotzin teaches a second communication interface 209 (Fig. 2).

Regarding claim 5, the combination including Kotzin teaches wherein each of the wireless interface and the second communication interface support respective types of wireless communication WAN and LAN (Fig. 2 and Sections 0013-0014).

Regarding claim 6, the combination including Kotzin teaches a third communication interface 211 or 223 or 225 (Fig. 2) supporting a wired connection (Section 0013).

Regarding claim 9, the combination including Kotzin teaches wherein a first connection opened using the negotiation service and the wireless interface is kept open while a second connection opened using the communication service and the second communication interface is open (Section 0017).

Regarding claim 10, the combination including Kotzin teaches wherein the negotiation service provides interface negotiation automatically (Sections 0019-0021).

Regarding claim 11, the combination including Kotzin teaches wherein the negotiation service provides interface negotiation in response to a request by a user (Section 0029).

Regarding claim 13, the combination including Kotzin teaches wherein the negotiation service selects a communication interface using settings previously provided by a user (Section 0029).

Regarding claim 16, the combination including Kotzin teaches wherein the wireless interface supports an indirect connection to another device using a network (Section 0013 and 0014).

Regarding claim 19, Kotzin teaches searching for a second device using a default interface of a first device (Sections 0019-0021); establishing a negotiation connection between the first device and the second device using the default interface (Sections 0019-0021); negotiating to select a communication interface using the negotiation connection (Sections 0019-0021); establishing a communication connection using the selected interface (Sections 0019-0021); communicating data between the first device and the second device using the communication connection (Sections 0019-0021), wherein the negotiating to select a communication interface includes negotiating to select an appropriate communication interface for communicating the data between the first device and the second device (Section 0019-0021); and closing the communication connection 427 (Fig. 4); wherein the default interface is a wireless

interface 203 or 209 (Fig. 2). It is obvious that there is communication of data between the devices since it is part of a network structure and supports services (messages, Sections 0013-0014). However, Kotzin fails to specifically teach communication of data.

Ishii et al. transferring data objects between portable devices teaches an interface for communication of data with another device (Section 0024).

Regarding claim 20, the combination including Kotzin teaches further comprising searching for the second device using a secondary interface 209 (Fig. 2).

Regarding claim 21, the combination including Kotzin teaches wherein the negotiation connection is open while the communication connection is open (Section 0017).

Regarding claim 22, the combination including Kotzin teaches wherein negotiating to select a communication interface includes determining one or more available interfaces (Sections 0019-0021); determining one or more compatible interfaces from among the one or more available interfaces (Sections 0019-0021); and selecting one of the one or more compatible interfaces as the communication interface using one or more communication criteria (Sections 0019-0021).

Regarding claim 24, the combination including Kotzin teaches wherein negotiating to select a communication interface also includes selecting a communication mode (Sections 0019-0021).

Regarding claim 29, Kotzin teaches means for searching for a second device using a default interface of a first device (Sections 0019-0021); means for establishing a negotiation connection between the first device and the second device using the default

interface (Sections 0019-0021); means for negotiating to select a communication interface using the negotiation connection (Sections 0019-0021); means for establishing a communication connection using the selected interface (Sections 0019-0021); means for communicating data between the first device and the second device using the communication connection (Sections 0019-0021), wherein the means for negotiating selects an appropriate communication interface for communicating the data between the first device and the second device (Sections 0019-0021); and means for closing the communication connection 427 (Fig. 4); wherein the default interface is a wireless interface 203 or 209 (Fig. 2). It is obvious that there is communication of data between the devices since it is part of a network structure and supports services (messages, Sections 0013-0014). However, Kotzin fails to specifically teach communication of data.

Ishii et al. transferring data objects between portable devices teaches an interface for communication of data with another device (Section 0024).

Regarding claim 30, the combination including Kotzin teaches means for determining one or more available interfaces (Sections 0019-0021); means for determining one or more compatible interfaces from among the one or more available interfaces (Sections 0019-0021); and means for selecting one of the one or more compatible interfaces as the communication interface using one or more communication criteria (Sections 0019-0021).

Regarding claim 31, the combination including Kotzin teaches means for selecting a communication mode (Sections 0019-0021).

Regarding claim 33, Kotzin teaches search for a second device using a default interface of a first device (Sections 0019-0021); establish a negotiation connection between the first device and the second device using the default interface (Sections 0019-0021); negotiate to select a communication interface using the negotiation connection (Sections 0019-0021); establish a communication connection using the selected communication interface (Sections 0019-0021); communicate data between the first device and the second device using the communication connection (Sections 0019-0021), wherein the step to negotiate to select a communication interface includes a step to negotiate to select an appropriate communication interface for communicating the data between the first device and the second device (Sections 0019-0021); and close the communication connection 427 (Fig. 4); wherein the default interface is a wireless interface 203 or 209 (Fig. 2). It is obvious that there is communication of data between the devices since it is part of a network structure and supports services (messages, Sections 0013-0014). However, Kotzin fails to specifically teach communication of data.

Ishii et al. transferring data objects between portable devices teaches an interface for communication of data with another device (Section 0024).

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kotzin (US Pat Appl# 2004/0204076) in view of Ishii et al. (US Pat Appl# 2005/0085188) as applied to claims 1 and 3 above, and further in view of Grannan (US Pat Appl# 2004/0203387).

Regarding claim 4, Kotzin's subscriber device for enhancing interfaces thereto in view of Ishii et al. transferring data objects between portable devices teaches the limitations in claims 1 and 3. Kotzin and Ishii et al. fail to teach about an interface that supports Wi-Fi.

Grannan system for controlling appliances teaches wherein a second communication interface supports Wi-Fi (Section 0007).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate an interface that supports Wi-Fi as taught by Grannan into communication of data as taught by Ishii et al. into Kotzin's wireless communication interface in order to improve communications (Section 0003).

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kotzin (US Pat Appl# 2004/0204076) in view of Ishii et al. (US Pat Appl# 2005/0085188) as applied to claims 1 and 3 above, and further in view of Janik (US Pat Appl# 2004/0253945).

Regarding claim 7, Kotzin's subscriber device for enhancing interfaces thereto in view of Ishii et al. transferring data objects between portable devices teaches the limitations in claims 1 and 3. Kotzin shows in figure 2 a WAN and LAN interface and it is known that a LAN has a higher data rate than a WAN. However, Kotzin and Ishii et al. fail to teach about a second communication interface providing a higher data rate than the wireless interface.

Janik system for interactivity for thin client devices teaches wherein the second communication interface (LAN) provides a higher data rate than the wireless interface (WAN) (Section 0017).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a second communication interface providing a higher data rate than the wireless interface as taught by Janik into communication of data as taught by Ishii et al. into Kotzin's wireless communication interface in order to optimize set up preferences for varying types of services delivered to devices (Section 0027).

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kotzin (US Pat Appl# 2004/0204076) in view of Ishii et al. (US Pat Appl# 2005/0085188) as applied to claims 1 and 3 above, and further in view of Moon et al. (US Pat Appl# 2005/0076054).

Regarding claim 8, Kotzin's subscriber device for enhancing interfaces thereto in view of Ishii et al. transferring data objects between portable devices teaches the limitations in claims 1 and 3. Kotzin and Ishii et al. fail to teach a second interface using more power than a wireless interface.

Moon et al. arrangement for autonomous mobile network nodes to organize a wireless mobile network teaches wherein a second communication interface uses more power than a wireless interface (Section 0037).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a second

interface using more power than a wireless interface as taught by Moon et al. into communication of data as taught by Ishii et al. into Kotzin's wireless communication interface in order to provide means to switch between communication modes (Sections 0015 and 0016).

6. Claims 12, 14-15, 17-18, 25, 27-28, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotzin (US Pat Appl# 2004/0204076) in view of Ishii et al. (US Pat Appl# 2005/0085188) and further in view of Shah et al. (US Pat Appl# 2004/0023652).

Regarding claim 12, Kotzin's subscriber device for enhancing interfaces thereto in view of Ishii et al. transferring data objects between portable devices teaches the limitations in claim 10. Kotzin and Ishii et al. fails to teach a negotiation service selects a communication interface without user input.

Shah et al. wireless personal communicator teaches wherein the negotiation service selects a communication interface without user input (Sections 0017-0029).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a negotiation service selects a communication interface without user input as taught by Shah et al. into communication of data as taught by Ishii et al. into Kotzin's wireless communication interface in order to switch from one type of network to another with out loss of connectivity (Section 0016).

Regarding claim 14, Shah et al. further teaches wherein the wireless interface supports a direct connection to another device (Section 0023).

Regarding claim 15, the combination including Shah et al. teaches wherein the direct connection is a newly established ad hoc network established with another device (Section 0023).

Regarding claim 17, Kotzin teaches wherein the wireless interface supports receiving a signal from an IEEE802.11b source (Section 0014), and the negotiation service uses the signal to open communication (Sections 0019-0021). Kotzin and Ishii et al. fails to clearly teach a beacon signal.

Shah et al. teaches IEEE802-based systems can share beacon frames (Section 0015).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a beacon signal as taught by Shah et al. into communication of data as taught by Ishii et al. into Kotzin's wireless communication interface in order to switch from one type of network to another with out loss of connectivity (Section 0016).

Regarding claim 18, Kotzin teaches wherein the signal indicates another device as a target device and a target interface, and another device is different from the IEEE802.11b source (Sections 0014 and 0019-0021). Kotzin and Ishii et al. fails to clearly teach a beacon signal.

Shah et al. teaches IEEE802-based systems can share beacon frames (Section 0015).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a beacon

signal as taught by Shah et al. into communication of data as taught by Ishii et al. into Kotzin's wireless communication interface in order to switch from one type of network to another with out loss of connectivity (Section 0016).

Regarding claim 25, Shah et al. further teaches wherein: the communication mode indicates whether to use a direct connection between the first device and the second device or an indirect connection between the first device and the second device for the communication connection (Sections 0017-0029).

Regarding claim 27, Kotzin teaches receiving a signal from an IEEE802.11b source at the device (Sections 0014 and 0019-0021); and determining a target device and a target interface using the signal (Sections 0019-0021); wherein the target device is the second device and the target interface is the default interface (Sections 0019-0021). Kotzin and Ishii et al. fails to clearly teach a beacon signal (IEEE802.11b).

Shah et al. teaches IEEE802-based systems can share beacon frames (Section 0015).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a beacon signal as taught by Shah et al. into communication of data as taught by Ishii et al. into Kotzin's wireless communication interface in order to switch from one type of network to another with out loss of connectivity (Section 0016).

Regarding claim 28, Kotzin further teaches wherein the target device is different from the beacon source (Sections 0014 and 0019-0021).

Regarding claim 32, Kotzin teaches means for receiving a signal from an IEEE802.11b source at the device (Sections 0014 and 0019-0021); and means for determining a target device and a target interface using the signal (Sections 0019-0021); wherein the target device is the second device and the target interface is the default interface (Sections 0019-0021). Kotzin and Ishii et al. fails to clearly teach a beacon signal (IEEE802.11b).

Shah et al. teaches IEEE802-based systems can share beacon frames (Section 0015).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a beacon signal as taught by Shah et al. into communication of data as taught by Ishii et al. into Kotzin's wireless communication interface in order to switch from one type of network to another with out loss of connectivity (Section 0016).

7. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kotzin (US Pat Appl# 2004/0204076) in view of Ishii et al. (US Pat Appl# 2005/0085188) in view of Carlton et al. (US Pat Appl# 2005/0141450) and in further view of Moon et al. (US Pat Appl# 2005/0076054).

Regarding claim 23, Kotzin's subscriber method for enhancing interfaces thereto in view of Ishii et al. transferring data objects between portable devices teaches the limitations in claim 19. Kotzin teaches a communication criteria (Sections 0019-0021), but it is unclear what parameters have to be met. Kotzin and Ishii et al. fail to teach clearly about a communication criteria that includes data rate and power use.

Charlton et al. method for integrating resource allocation between wireless communication systems teaches a communication criteria that includes data rate (Section 0027). Charlton et al., Ishii et al., and Kotzin fail to teach a communication criteria that includes power use.

Moon et al. arrangement for autonomous mobile network nodes to organize a wireless mobile network teaches a communication criteria that includes power use (Section 0037).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a communication criteria that includes data rate as taught by Charlton et al. into a communication criteria that includes power use. as taught by Moon et al. into communication of data as taught by Ishii et al. into Kotzin's wireless communication interface in order to provide means to switch between communication modes (Sections 0015 and 0016).

8. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kotzin (US Pat Appl# 2004/0204076) in view of Ishii et al. (US Pat Appl# 2005/0085188) as applied to claims 19, 22, and 24 above, and further in view of Ahonen (US Pat Appl# 2005/0190920).

Regarding claim 26, Kotzin's subscriber device for enhancing interfaces thereto in view of Ishii et al. transferring data objects between portable devices teaches the limitations in claim 19, 22, and 24. Kotzin and Ishii et al. fails to teach an encryption set up in a communication mode.

Ahonen's digital wireless data communication network for arranging end to end encryption teaches wherein the communication mode indicates a type of encryption to use for the communication connection (Sections 0001-0008 and 0028-0030).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate an encryption set up in a communication mode as taught by Ahonen into communication of data as taught by Ishii et al. into Kotzin's wireless communication interface in order to increase security (Section 0021).

***Response to Arguments***

9. Applicant's arguments with respect to claims 1-33 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Wendell whose telephone number is 571-272-0557. The examiner can normally be reached on 7:30-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Andrew Wendell*

Andrew Wendell  
Examiner  
Art Unit 2618

5/19/2006

*N. Maung*  
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SUPERVISORY PATENT EXAMINER